Video Scaler/Converter

DVI to DVI-I PC/HD Scaler Video Converter

DVI2DVI

Instruction Manual

StarTech.com

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FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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Introduction

Thank you for purchasing a StarTech.com DVI to DVI-I scaler video converter. This product allows you to convert between a DVI-D source signal and DVI-I(digital + analog RGB) output. The input resolution is automatically detected while the output resolution and refresh rate can be selected through an on-screen menu with the buttons located on the front of the panel.

Features

- Converts DVI-D video input to DVI-I signal output. A DVI-D source can be displayed onto a DVI-I display, supporting a variety of resolutions
- 48MB frame memory for frame rate conversion
- Input resolution is automatically detected while output resolution and refresh rate can be selected through an on-screen display menu and front panel push buttons
- On-screen display allowing adjustments to brightness, contrast, color and Horizontal/Vertical positioning
- DVI output enables an entirely digital rendering of video without the losses associated with an analog interface

Before You Begin

System Requirements

- A DVI video source
- A display capable of using a DVI-I signal
- Cables necessary to make connections between input, scaler and display

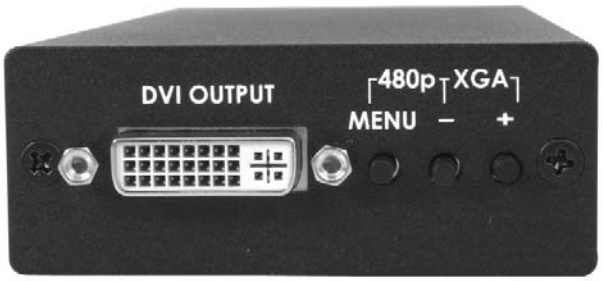
Contents

- DVI2DVI scaler video converter
- 1 x DVI Cable
- 1 x 5V DC 2Amp Power Adapter
- 1 x User Manual

Installation

These instructions assume that the display has at least one available input that uses a DVI-I video signal, and that all the devices have their cables attached. You may need to disconnect an existing device from the display to make an input available and re-connect that device using the video scaler.

Front



Back

Connecting Devices to the Scaler

1. Place the scaler near the display and the devices you wish to use with the scaler.

2. Connect the input device (i.e. a DVD player) to the connector labeled **DVI Input** on the back of the video scaler converter.

3. Connect the scaler to your display device, using the port marked **DVI OUTPUT** on the front of the scaler. If you require a VGA resolution output, use a DVI to VGA adapter and VGA to VGA cable to make this connection (see **Accessory Products available from StarTech.com**).

4. Connect the power adapter (provided) to the port marked **DC 5V** on the back of the video scaler. Connect the opposite end to a wall outlet or other suitable power source. The red light located next to the DC 5V output will illuminate once the scaler is powered.

5. If you are using a DVI-I display, the scaler converter is now ready to use. If you are using an RGB (VGA) display, adjustments will be required from within the On-screen menu (Please see **Menu and Adjustments**)

Using the Video Scaler

Once you have connected the desired input and output devices to the video scaler, you can proceed to test the connection to the television or other display. Turn on the display, and select the input to which you connected the video switch. Consult the documentation for your display if you are unsure on how to select A/V inputs. Usually, there will be a button on the display's remote or front panel labeled **INPUT** or **A/V**. If the display has multiple inputs, you will need to ensure the input you have selected corresponds to the connectors on the television you used for the scaler. Power on the devices you connected to the video scaler. Pressing the **MENU** button located on the front of the scaler converter will bring up the on-screen display controls on the screen as follows:

Input Setup
Output Setup
Picture Adjust
HV Adjust
OSD Adjust
System Information
Auto Adjust
Exit

Using the **+** or - buttons, move the cursor to your desired selection, then press **Menu** to confirm your selection and enter the corresponding sub-menu. Once selected, each parameter can be adjusted by using the **+** or **-** buttons to increase the setting value.

Input set up
When selected, a sub-menu for selecting either YPbPr or RGB as your input signal will appear. **Note:** This scaler video converter will automatically detect your input signal, however manual adjustment of this setting is available by using the + or - buttons located on the front panel of the scaler video converter**.** Pressing **Menu** will save your selection and exit this sub-menu.

Output set up
When selected, a sub-menu will appear giving you options as to the desired output, either DVI-A (analog) or DVI-D (digital). Once you have selected the appropriate output signal, use the **+** or **-** buttons to choose the correct resolution/refresh rate. The following output refresh rates/resolutions are available:

Output modes available for DVI-A (Analog)

PC (RGBHV)			HDTV (YPbPr, RGBHV)		
VGA	640x480	60/72/75/85 Hz	**1080i -RGB**	1920x1080	60 Hz
VESA85	640x400	85 Hz	**720p -RGB**	1280x720	60 Hz
VGA70	720x400	70 Hz	**576p -RGB**	720x576	50 Hz
SVGA	800x600	60/72/75/85 Hz	**480p -RGB**	720x480	60 Hz
XGA	1024x768	60/70/75/85 Hz	**1080i -YPbPr**	1920x1080	60 Hz
Mac	1152x864	70/75 Hz	**720p -YPbPr**	1280x720	60 Hz
WXGA	1280x768	60 Hz	**576p -YPbPr**	720x576	50 Hz
1280A	1280x960	60 Hz	**480p -YPbPr**	720x480	60 Hz
SXGA	1280x1024	60/75 Hz			

Output modes available for DVI-D (Digital)

PC (RGBHV)			HDTV (RGBHV)		
VGA	640x480	60/72/75/85 Hz	**1080i -RGB**	1920x1080	60 Hz
VESA85	640x400	85 Hz	**720p -RGB**	1280x720	60 Hz
VGA70	720x400	70 Hz	**576p -RGB**	720x576	50 Hz
SVGA	800x600	60/72/75/85 Hz	**480p -RGB**	720x480	60 Hz
XGA	1024x768	60/70/75/85 Hz			
Mac	1152x864	70/75 Hz			
WXGA	1280x768	60 Hz			
1280A	1280x960	60 Hz			
SXGA	1280x1024	60/75 Hz			

Pressing **Menu** will save your selection and return you to the main menu.

Picture Adjust
This sub-menu allows you to adjust the contrast, brightness and color of the displayed image. Using the **+** and - buttons, select the attribute you wish to change, and use the **Menu** button to confirm your selection. Use the **+** or **-** buttons to increase or decrease the amount of the element you are modifying, followed by the **Menu** button to save. Repeat this procedure for each element as desired. Once you have made the necessary adjustments, use the **+** or **-** button to navigate to the **Exit**, which will take you back to the main menu. **NOTE:** using the **Reset** feature will return all adjustments back to the factory reset values.

HV Adjust
When chosen, a sub-menu will appear, allowing you to adjust the best horizontal and vertical position of the picture, using the **+** or **-** buttons.

OSD Adjust
Allows you to adjust the horizontal and vertical position of the on-screen menu.

System Information
Displays the input and output resolutions and their vertical refresh rate on the screen.

Auto Adjust
When chosen, the scaler will automatically adjust all parameters to the factory preset values.

Exit
When selected, exits the on-screen display

Specifications

Input Resolutions:

Digital	PC (RGBHV)		HDTV (YPbPr, RGBHV)		
VGA	640x480	60/72/75/85 Hz	**1080i**	1920x1080	60 Hz
VESA85	640x400	85 Hz	**720p**	1280x720	60 Hz
VGA70	720x400	70 Hz	**576p**	720x576	50 Hz
SVGA	800x600	60/72/75/85 Hz	**480p**	720x480	60 Hz
XGA	1024x768	60/70/75/85 Hz	**576i**	720x576	50 Hz
Mac	1152x864	70/75 Hz	**480i**	720x480	60 Hz
WXGA	1280x768	60 Hz			
1280A	1280x960	60 Hz			
SXGA	1280x1024	60/75 Hz			

Output Resolutions:

PC (RGBHV)			HDTV (RGBHV) *		
VGA	640x480	60/72/75/85 Hz	**1080i**	1920x1080	60 Hz
VESA85	640x400	85 Hz	**720p**	1280x720	60 Hz
VGA70	720x400	70 Hz	**576p**	720x576	50 Hz
SVGA	800x600	60/72/75/85 Hz	**480p**	720x480	60 Hz
XGA	1024x768	60/70/75/85 Hz			
Mac	1152x864	70/75 Hz			
WXGA	1280x768	60 Hz			
1280A	1280x960	60 Hz			
SXGA	1280x1024	60/75 Hz			

***HDTV YPbPr format is only available on Analog output**

Input Format: Digital RGBHV, YPbPr or YCbCr
Input Signal: Digital RGB data bitstream
Input Connector: 24-pin DVI-D connector
Output Format: Analog RGBHV + Analog RGBHV or YPbPr(through DVI to HD-15 adapter)
Output Signal: Digital data bitstream
Output Connector: 24-pin DVI-D connector
Power: 5V 2A center-positive

Troubleshooting

If you're having difficulty using the video scaler, try the following solutions based on the nature of the problem.

No image is being shown on the display.

1) Ensure the video scaler is plugged in and receiving power. One LED indicator on the front panel will be lit when the switch is receiving power.

2) Try selecting another input on the display and verify which input the scaler is connected to. Most displays will have their A/V inputs marked with a number, so ensure the input selected on the screen matches the physical connection between the scaler and the display.

3) Verify cable connections between the input device, video scaler and display are snug.

Video quality is poor.

1) Verify cable connections between the input device, video scaler and display are snug.

2) Using lengthy cables may cause signal degradation. Try to locate the scaler as close to the input device and display, as possible.

3) Enter the **Picture Adjust** sub-menu, ensure that Contrast, Brightness and Color are set appropriately.

4)Ensure that the proper input signal is selected in the **Input Setup** sub-menu.

Accessory Products from StarTech.com

Contact your local StarTech.com dealer or visit **www.startech.com** for cables or other accessories that will help you get the best performance out of your new product.

ZENDVI1
Cable ZEN 3.3 ft (1m) DVI Digital Video Cable

ZENDVI2
Cable ZEN 6.6 ft (2m) DVI Digital Video Cable

ZENDVI4
Cable ZEN 13.1 ft (4m) DVI Digital Video Cable

DVIVGAMM6
6 Ft. DVI to VGA Analog Flat Panel Display Cable

DVIVGAMF
DVI to VGA Display Adapter

Technical Support

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Warranty Information

This product is backed by a one-year warranty. In addition, StarTech.com warrants its products against defects in materials and workmanship for the periods noted, following the initial date of purchase. During this period, the products may be returned for repair, or replacement with equivalent products at our discretion. The warranty covers parts and labor costs only. StarTech.com does not warrant its products from defects or damages arising from misuse, abuse, alteration, or normal wear and tear.

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